IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of

GÖTTL, M. et al.

Atty. Ref.: 265-106

Serial No. 10/049,809

Group: 2821

Filed: February 19, 2002

Examiner:

For: HIGH-FREQUENCY PHASE SHIFTER UNIT

February 6, 2003

Assistant Commissioner for Patents Washington, DC 20231

Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

In accordance with Rule 97, the undersigned attorney submits the documents listed on the attached forms PTO-1449. A copy of each document is enclosed.

The Examiner is requested to initial the attached forms PTO-1449 and to return a copy to the undersigned as an indication that the attached documents have been considered and made of record in this case.

Respectfully submitted,

NIXON & VANDERHYE P.C.

Robert W. Faris

Reg. No. 31,352

RWF:eis

1100 North Glebe Road, 8th Floor

Arlington, VA 22201-4714

Telephone: (703) 816-4000

Facsimile: (703) 816-4100

INFORMATION DISCLOSURE **CITATION**

*Examiner

ATTY. DOCKET NO.

SERIAL NO.

265-106

10/049,809

APPLICANT

GOTTL et al.

(Use several sheets if necessary) FILING DATE

GROUP

2/19/2002

2821

| | STEW 6 THE | OCINE S | U.S. PATENT DOCUMENTS | | | |
|-----------|-----------------|---|-----------------------|----------|---------------|----------------|
| *EXAMINER | C TRI | io de la companya de | | · | | FILING DATE |
| INITIAL | DOCUMENT NUMBER | DATE | NAME Friis | CLASS_ | SUBCLASS T | IF APPROPRIATE |
| | 2,041,600 | 05/1936 | | | | |
| | 2,432,134 | 12/1947 | Bagnall | | | |
| | 2,540,696 | 02/1951 | Smith, Jr. | | | |
| | 2,596,966 | 05/1952 | Lindsay, Jr. | | | |
| | 2,648,000 | 08/1953 | White | | | |
| | 2,773,254 | 12/1956 | Engelmann | | - | |
| | 2,836,814 | 05/1958 | Nail | | | |
| | 2,968,808 | 01/1961 | Russell | | | |
| | 3,032,759 | 05/1962 | Ashby | | | |
| | 3,032,763 | 05/1962 | Sletten | <u> </u> | | |
| | 3,969,729 | 07/1976 | Nemit | | | |
| | 4,129,872 | 12/1978 | Toman | | | |
| | 4,241,352 | 12/1980 | Alspaugh et al. | | | <u> </u> |
| | 4,427,984 | 01/1984 | Anderson | | - | |
| | 4,446,463 | 05/1984 | Irzinski | | | |
| | 4,532,518 | 07/1985 | Gaglione et al. | | · | |
| | 4,564,824 | 01/1986 | Boyd, Jr. | | | |
| | 4,570,134 | 02/1986 | Woodward | | , | |
| | 4,575,697 | 03/1986 | Rao et al. | | | |
| | 4,602,227 | 07/1986 | Clark et al. | | | |
| | 4,616,195 | 10/1986 | Ward et al. | | | |
| | 4,635,062 | 01/1987 | Bierig et al. | | | |
| | 4,652,887 | 03/1987 | Cresswell | | | |
| | 4,714,930 | 12/1987 | Winter et al. | | | |
| | 4,717,918 | 01/1988 | Finken | | | |
| | 4,755,778 | 07/1988 | Chapell | | | |
| | 4,768,001 | 08/1988 | Chan-Son-Lint et al. | | | |
| | 4,788,515 | 11/1988 | Wong et al. | | | |
| | 4,791,428 | 12/1988 | Anderson | | | |
| | 4,804,899 | 02/1989 | Wurdack et al. | | | |
| | 4,814,774 | 03/1989 | Herczfeld | | | |
| | 4,821,596 | 04/1989 | Eklund | | | |
| | 4,843,355 | 06/1989 | Knorr | | | |
| | 4,849,763 | 07/1989 | DuFort | | | |
| | 5,162,803 | 11/1992 | Chen | | | |
| | 5,181,042 | 01/1993 | Kaise et al. | | | |
| | 5,184,140 | 02/1993 | Hariu et al. | | | |
| | 5,214,364 | 05/1993 | Perdue et al. | | | |
| | 5,281,974 | 01/1994 | Kuramoto et al. | | | |
| | 5,440,318 | 08/1995 | Butland et al. | | | |
| | | | | | | |

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Date Considered

SERIAL NO. ATTY. DOCKET NO. INFORMATION DISCLOSURE **CITATION** 10/049,809 265-106 **APPLICANT** GOTTL et al. (Use several sheets if necessary) GROUP FILING DATE 2/19/2002 2821 U.S. PATENT DOCUMENTS DOCUMENT NUMBER FILING DATE *EXAMINER DATE NAME CLASS SUBCLASS IF APPROPRIATE INITIAL Harbin et al. 5,488,737 01/1996 5,512,914 04/1996 Hadzoglou et al. 5,551,060 08/1996 Fujii et al. 03/1998 Hargrave, III et al. 5,724,593 5,798,675 08/1998 Drach Butland et al. 5,801,600 09/1998 09/1998 Salmela 5,805,996 Bartholomew 5,818,385 10/1998 5,905,462 05/1999 Hampel et al. 5,983,071 11/1999 Crosby et al **SOGO** 6,078,824 06/2000 10/2000 Hargrave, III et al. 6,131,082

Martek King et al.

Clark

Heinz et al.

Heinz et al. Heinz et al.

Heinz et al.

6,188,373

6,278,969

6,345,243

2002/0135530A1

2002/0149528A1

2002/0140619A1

2002/0186172a1

*Examiner

02/2001

08/2001

02/2002

09/2002

10/2002

10/2002

12/2002

| FOREIGN PATENT DOCUMENTS | | | | | | | |
|------------------------------|-------------|---------|---------|-------|----------|--------|-------|
| | | | | | | TRANSI | ATION |
| | DOCUMENT | DATE | COUNTRY | CLASS | SUBCLASS | YES | NO |
| | 933874 | 05/1993 | AU | | | | |
| | 9341625 | 06/1993 | AU | | | | |
| | 9480057 | 10/1994 | AU . | | | | |
| 1 | EP0106438 | 04/1984 | EP | | | | |
| | EP0137562A2 | 04/1985 | EP | | | | |
| 1 | EP0241153A2 | 06/1987 | EP | | | | L |
| | EP0357085 | 03/1990 | | | | | |
| | EP0357165A2 | 03/1990 | EP | | · | | |
| | EP0398637A2 | 11/1990 | EP | | | | |
| | EP0423512A2 | 04/1991 | EP | | | | |
| | EP0588179A1 | 03/1994 | EP | | | | |
| | _ EP0618639 | 03/1994 | EP | | | | |
| | EP0595726A1 | 05/1994 | EP | | | | |

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Date Considered

INFORMATION DISCLOSURE SERIAL NO. ATTY. DOCKET NO. **CITATION** 10/049,809 265-106

APPLICANT

(Use several sheets

GOTTL et al. FILING DATE

> 2821 2/19/2002

GROUP

FOREIGN PATENT DOCUMENTS

| | The sale |) | REIGN PATENT DOCUMENTS | | ······ | TRANS | LATION |
|-----|--------------|----------|------------------------|-------|----------|-------|--------|
| | DOCUMENTADES | DATE | COUNTRY | CLASS | SUBCLASS | YES | NO |
| | EP0310661B1 | 06/1994 | EP | | | | |
| | 1 026 778 A2 | 08/2000 | EP | | | | |
| | EP 1 067 626 | 1/2001 | EP | | | | |
| | FR2581255A1 | 10/1986 | France | | | | |
| . 7 | 1 314 693 | 04/1973 | ÜK | | | | |
| | GB2035700A | 12/1979 | UK | | | | |
| | GB2158996A | 01/1983 | UK | | | | |
| | 2 115 984 | 08/1983 | UK | | | | |
| | GB2165397A | 09/1983 | UK | | | | |
| | 2 158 997 | 04/1985 | UK | | | | |
| 1 | GB2159333A | 11/1985 | UK | | | | |
| | GB2196484A | 04/1988 | UK | | | | |
| | GB2205946 | 12/1988 | UK | | | | |
| | GB2232536A | 08/1991 | UK | | | · | |
| | 2737714 | 03/1979 | Germany | | | | |
| | 3322-986A | 06/1983 | Germany | | | | |
| | DE33233234A1 | 01/1985 | Germany | | | | |
| | 3902739 | 08/1990 | Germany | | | | |
| 1 | 59-90401 | 05/1984 | Japan | | | | |
| | JP61-172411 | 08/1986 | Japan | | | | |
| | JP1120906A | 05/1989 | Japan | | | | |
| | JP2121504A | 05/1990 | Japan | | | | |
| | JP2174402A | 07/1990 | Japan | | | | |
| | JP2290306A | 11/1990 | Japan | | | | |
| | 4-144518/18 | 02/1992 | Japan | | | | |
| | 4-2014705/25 | 05/1992 | Japan | | | | |
| | JP4286407A | 10/1992 | Japan | | | | |
| 7 | 5-131915 | 05/1993 | Japan | | | | |
| | JP5191129A | 07/1993 | Japan | | | | |
| | JP6196927A | 07/1994 | Japan | | | | |
| | NZ24897 | 10/1993 | NZ | | | | |
| | NZ264864 | 11/1994 | NZ | | | | |
| | NZ272778 | 08/1995 | NZ | | | | |
| | WO88/00862A1 | 05/1989 | PCT | | | | |
| | WO95/10862 | 04/1995 | PCT | | | | |
| | WO96/14670 | 05/1996 | PCT | | | | |
| | 98/42042 | 09/1998 | PCT | | | | |
| | 93-125240/15 | 05/1992 | Russian Federation | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | <u> </u> | | |

Date Considered *Examiner

| INFORMATION DISCLOSUR | E ATTY. DOCKET NO. | SERIAL NO. | | | | | |
|---|---|---|--|--|--|--|--|
| CITATION | 265-106 | 10/049,809 | | | | | |
| | APPLICANT | | | | | | |
| PE | GOTTL et al. | | | | | | |
| (Use sere at sheets if necessary) | FILING DATE | GROUP | | | | | |
| THE DE MAN SE | 2/19/2002 | 2821 | | | | | |
| | | | | | | | |
| | • | | | | | | |
| THE DO | CUMENTS (including Author, | Title, Date, Pertinent pages, etc.) | | | | | |
| Strickland, "Microstri CH2944 1991). | | ular Communications" Proceedings, pp. 166-169 (IEEE | | | | | |
| Faruque, "Cellular C | Faruque, "Cellular Control Channel Capacity: Evaluation and Enhancement," pp. 400-404 (IEEE 1992) | | | | | | |
| "Electrically Tilted Pa | anel Antennas," IMCE Engineerin | g Meeting, Anaheim, pp. 1-10 (25 March 1993) | | | | | |
| "Second Generation (1-4 March 1994) | Variable Electrical Tilt Panel Ant | iable Electrical Tilt Panel Antenna," CTIA Technical Meeting, San Diego, pp 1-10 | | | | | |
| "Ongoing Developm | ent of Electrically Tilted Panels," | MTS Engineering Meeting, Dallas (25-28 March 1996) | | | | | |
| | Antenna Height, Antenna Gain, ar nicular Technology, Vol. 45, No. 2 | d Pattern Downtilting for Cellular Mobile Radio," IEEE (May 1996) | | | | | |
| Arowojulu et al., "Co | introlling the Coverage Area of a | Microcell," University of Liverpool, UK, pp. 72-75 (1993) | | | | | |
| "Cellular Panel Ante | nna," Radio Frequency Systems | Pty. Limited, Doc. No. 26900E000, Issue 1, 6 pages | | | | | |
| | ouncing the PerforMax™ Dual Po ando Park, IL (Andrew Corp. 8/6/ | larized Wideband Variable Electrical Downtilt Antenna 2001) | | | | | |
| New product announcement, "PerforMax™ Dual Polarized wideband variable electrical downt 3G rollouts," (Andrew Corp. 2001) | | | | | | | |
| Press release, Andre | ecs Teletilt™ Business," Orlando Park, IL (7/20/2001) | | | | | | |
| Press release, Andro (10/19/2001) | Press release, Andrew Corp., "Andrew and Argus Announce Licensing Agreement," Orlando Park, IL (10/19/2001) | | | | | | |
| | | ersus Mechanical Downtilt," Vehicular Technology y, Volume 1 of 2, pages 1-4 (5/18/1992) | | | | | |
| I I ' ' | Yamada, "Base and Mobile Station Antennas for Land Mobile Radio Systems," IEICE TRANSACTION E 74, NO. 6 (6/1991) Lovis, "Aufbau Und Strahlungseigenschaften Einer Elektronisch Gesteuerten Sekundarradarantenna Technical Reports Volumne 57, Papers of the NTG Conference (March 8 to 11, 1977 Bad Neiheim) translation | | | | | | |
| Technical Reports V | | | | | | | |
| | Specifications: Mobile Telephone and Panel Array (MPTA) Antenna, VARITILT Continuously Variable Electrical Downtilt Models; Deltec New Zealand Limited | | | | | | |
| * Heath, B., "Design S | Heath, B., "Design Specification for Premium Antenna with EDT and AS" (1993) | | | | | | |
| * Friis, The Bell Syste | Friis, The Bell System Technical Journal, XXVI:218-316, "Radar Antennas" (1947) | | | | | | |
| * Bacon, G.E., "Variat | Bacon, G.E., "Variable-Elevation Beam-Arial Systems for 1 1/2 Metres," <u>Journal I.E.E.</u> , 93:539-544 (1946) | | | | | | |
| | * Kummer, W.H., "Electromechanical Devices," <u>Microwave Scanning Antennas</u>, III:48-130 * Mills et al., "The Sydney University Cross-type Radio Telescope," <u>Proceedings of the I.R.E. Australia</u>, pp 156-165 (1963) | | | | | | |
| | | | | | | | |
| | Yamada et al., "Low Sidelobe and Tilted Beam Base-Station Antennas for Smaller-Cell Systems," NTT Radi RadioCommunication Systems Laboratories and Nipon Telegraph and Telephone Corporation | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| * Document not available. | | to Considered | | | | | |
| *Examiner | Da | te Considered | | | | | |